

CLASSIFICATION: ENGINEERING TECHNICIAN I

Class Code: 4085-10

Date Established: 02-21-64

Occupational Code: 9-2-4

Date of Last Revision: 02-10-05

Exempt Status: Non-Exempt

BASIC PURPOSE: To perform technical engineering duties in a designated area, including field and laboratory testing, design, construction and environmental studies.

CHARACTERISTIC DUTIES AND RESPONSIBILITIES:

- Performs technical engineering duties in a designated area, including field and laboratory testing, design construction, auditing, and environmental studies.
- Takes field samples and performs a variety of field or laboratory tests of soils; maintains files on statistical data and resource information.
- Conducts traffic surveys, compiles field notes and processes traffic data.
- Makes field inspections on construction materials, including routine quality control checks.
- Plots and audits charts, maps, and construction records based on specific engineering data.
- Recommends landscaping along designated roadside areas in accordance with standardized agency procedures.

DISTINGUISHING FACTORS:

Skill: Requires skill in recommending routine changes in standardized operating procedures OR in retrieving, compiling and reporting data according to established procedures OR in operating complex machines.

Knowledge: Requires understanding and using business or trades vocabulary or basic arithmetic to perform standard operating procedures.

Impact: Requires responsibility for contributing to agency objectives by ensuring the accuracy of support activities within one or more organizational units. Errors at this level affect the work of others or have measurable monetary consequences, and require verification and correction in order to complete succeeding work operations.

Supervision: Requires no supervision of employees or functions.

Working Conditions: Requires performing regular job functions in an environment which includes exposure to continuous physical elements or a number of disagreeable working conditions with frequent exposure to minor injuries or health hazards.

Physical Demands: Requires medium work, including continuous strenuous activities such as frequent reaching, bending, or lifting as well as performing work activities which require fine manual dexterity or coordination in operating machines or equipment.

Communication: Requires obtaining and exchanging information, referring inquiries to the appropriate source, or responding to questions from state employees or members of the general public.

Complexity: Requires a combination of job functions using minimal judgment to perform a variety of job tasks according to clearly prescribed standard practices and procedures.

Independent Action: Requires making a limited number of choices in selecting among alternative courses of action under supervisory guidance and in performing job functions according to a variety of prescribed policies or procedures.

MINIMUM QUALIFICATIONS:

Education:

Department of Transportation:

- (1) Graduation from high school, or G.E.D. equivalent.
- (2) Associate's degree from a recognized college or technical institute with a major study in engineering, landscape, architecture, forestry, horticulture, environmental studies, agronomy, geology, soil science or earth science.

Department of Environmental Services:

- (3) Graduation from high school, or G.E.D. equivalent.
- (4) Associate's degree from a recognized college or technical institute with a major study in engineering, hydrology, geology, earth sciences, or environmental studies.

Experience:

Department of Transportation:

- (1) Two years' experience as an Engineering Aide, one year of which shall have been at a level equivalent to Engineering Aide
- (2) No experience required.

Department of Environmental Services:

- (3) Two years' experience at a level equivalent to Engineering Aide.
- (4) No experience required.

License/Certification: Valid driver's license and access to transportation if required for performing engineering field work. Any additional license requirement must be stated on the supplemental job description and approved by the Division of Personnel prior to posting at the agency level.

RECOMMENDED WORK TRAITS: Knowledge of fundamental engineering, including working knowledge of fundamental mathematics and algebra. Some knowledge of material testing and elementary design. Moderate skill in use of material testing, drafting and computing instruments. Ability to make simple drawings, tracings, maps, and technical computations. Ability to perform simple laboratory tests and assume inspectional responsibilities. Ability to establish and maintain effective working relationships with other employees, contractors and the general public. Must be willing to maintain appearance appropriate to assigned duties and responsibilities as determined by the agency appointing authority.

DISCLAIMER STATEMENT: This class specification is descriptive of general duties and is not intended to list every specific function of this class title.